

Central Depository Services (India) Limited

Convenient # Dependable # Secure COMMUNIQUÉ TO DEPOSITORY PARTICIPANTS

CDSL/RISK/DP/POLCY/2024/214

April 22, 2024

REPORTING FOR ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING (ML) APPLICATIONS AND SYSTEMS OFFERED AND USED BY MARKET INTERMEDIARIES.

DPs are advised to refer to SEBI Circular no. SEBI/HO/MIRSD/DOS2/CIR/P/2019/10 dated January 04,2019, and CDSL Communique no. CDSL/OPS/DP/POLCY/2019/12 dated January 07, 2019, and CDSL/A, I&C/DP/POLCY/2024/12 dated January 05,2024 regarding Reporting FOR Artificial Intelligence (AI) and Machine Learning (ML) applications and systems offered and used by market intermediaries.

As per the communication received from SEBI, the frequency of submission of aforesaid report on AI and ML applications and systems has been changed from 'Quarterly' to 'Annually'. DPs are advised to take note of aforesaid change and submit the report on AI and ML applications and systems in the prescribed format (Annexure A) as per revised timelines mentioned below with immediate effect:

Report	Current Timeline	Revised Timeline
Depository Participants using AI and	Quarterly basis within	Annually, within three
ML based application, or system as	15 calendar days of the	months of the end of the
defined in Annexure B, are required	expiry of the quarter	financial year.
to fill in the form (Annexure A).		

The submission of aforesaid AI and ML applications report is mandatory for all the DPs irrespective of whether they are using AI and ML systems or not. DPs not using AI and ML systems are required to submit NIL submission.

DPs are required to submit this report of AI and ML on CDSL's audit web portal (https://auditweb.cdslindia.com) for the financial year ended March 31, 2024, onwards within three months of the end of the financial year.

DPs are advised to take note of the above and ensure compliance.

Queries regarding this communiqué may be addressed to: CDSL – Helpdesk Emails may be sent to: helpdesk@cdslindia.com and telephone number 08069144800.

sd/-

Ashwin Lalchandani Assistant Vice President - Risk Management

Annexure A - Form to report on AI and ML technologies — To be Submitted Annually Intimation to Stock Exchange / Depository for the use of the AI and ML application and systems.

SNo.	Head	Value
1	Entity SEBI registration number	
2	Registered entity category	
3	Entity name	
4	Entity PAN no	
5	Application / System name	
6	Date from when the Application / System was used	
7	Type of area where AI or ML is used	<pre><order (please="" 256="" advisory="" aml="" characters)="" compliance="" execution="" in="" kyc="" others="" services="" specify="" surveillance=""></order></pre>
7.a	Does the system involve order initiation, routing and execution?	<yes no=""></yes>
7.b	Does the system fall under discretionary	<yes no=""></yes>
	investment or Portfolio management activities?	
7.c	Does the system disseminate investment or trading advice or strategies?	<yes no=""></yes>
7.d	Is the application/system used in area of Cyber	<yes no=""></yes>
	Security to detect attacks	
7.e	What claims have been made regarding AI and ML Application / System - if any?	<free field="" text=""></free>
8	What is the name of the Tool / Technology that is	<free field="" text=""></free>
	categorized as AI and ML system / Application and	
	submissions are declared vide this response	
9	How was the AI or ML project implemented	Internally / through solution provider / Jointly with a solution provider or third party>
10	Are the key controls and control points in your Al	<free field="" text=""></free>
	or ML application or systems in accordance to circular of SEBI that mandate cyber security control requirements	
11	Is the AI / ML system included in the system audit, if applicable?	<yes na="" no=""></yes>
12	Describe the application / system and how it uses AI / ML as portrayed in the product offering	<free field="" text=""></free>
13	What safeguards are in place to prevent abnormal behavior of the AI or ML application / System	<free field="" text=""></free>

Annexure B – Systems deemed to be based on AI and ML technology

Applications and Systems belonging but not limited to following categories or a combination of these:

- Natural Language Processing (NLP), sentiment analysis or text mining systems that gather
 intelligence from unstructured data. In this case, Voice to text, text to intelligence systems
 in any natural language will be considered in scope. Eg: robo chat bots, big data intelligence
 gathering systems.
- 2. Neural Networks or a modified form of it. In this case, any systems that uses a number of nodes (physical or software simulated nodes) mimicking natural neural networks of any scale, so as to carry out learning from previous firing of the nodes will be considered in scope. Eg: Recurrent Neural networks and Deep learning Neural Networks
- 3. Machinelearning through supervised, unsupervised learning or a combination of both. In this case, any application or systems that carry out knowledge representation to form a knowledge base of domain, by learning and creating its outputs with real world input data and deciding future outputs based upon the knowledge base. Eg: System based on Decision tree, random forest, K mean, Markov decision process, Gradient boosting Algorithms.
- 4. A system that uses statistical heuristics method instead of procedural algorithms or the system / application applies clustering or categorization algorithms to categorize data without a predefined set of categories
- 5. A system that uses a feedback mechanism to improve its parameters and bases it subsequent execution steps on these parameters.
- 6. A system that does knowledge representation and maintains a knowledge base.